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# A New Species of the Assassin Bug Genus *Parendochus* (Insecta: Heteroptera: Reduviidae), with Notes on *P. leptocorisoides*

#### Tadashi Ishikawa and Shûji Okajima

Laboratory of Insect Resources, Faculty of Agriculture, Tokyo University of Agriculture, Funako 1737, Atsugi-shi, Kanagawa, 243-0034 Japan E-mail: chuishikawa@hotmail.com (TI); okajima@nodai.ac.jp (SO)

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A new species of the harpactorine assassin bug genus *Parendochus*, *P. gracilis*, is described from Vietnam as the second member of the genus. *Parendochus leptocorisoides* (China, 1940) is recorded from Thailand for the first time, with a supplementary description.

**Key Words:** Insecta, Hemiptera, Heteroptera, Reduviidae, Harpactorinae, *Parendochus*, Vietnam, Thailand.

#### Introduction

The harpactorine reduviid genus *Parendochus* was proposed by Hsiao (1979) to accommodate a single species of assassin bug, *Endochus leptocorisoides* China, 1940, from southern China. The genus is peculiar among related genera in having an elongate, subparallel-sided body and an anterior pronotal lobe continuous with the posterior pronotal lobe at the same level. Since its original description, no other species has been added to the genus.

In addition to *P. leptocorisoides*, we discovered a distinct, undescribed species among a series of undetermined specimens of *Parendochus* recently collected in Southeast Asia. In this paper, we describe a new species based on material from Vietnam and provide a supplementary description of *P. leptocorisoides*.

All specimens are deposited in the collection at the Laboratory of Insect Resources, Tokyo University of Agriculture, Atsugi, Japan.

## **Taxonomy**

## Genus *Parendochus* Hsiao, 1979

Parendochus Hsiao, 1979: 247. Type species: Endochus leptocorisoides China, 1940, by original designation.

**Diagnosis.** Body elongate, subparallel-sided. Head cylindrical, as long as pronotum, with spine behind each antennal insertion; anteoculus slightly shorter than postoculus. Rostral segment I longer than segments II and III combined, as

long as anteoculus and eye combined. Anterior pronotal lobe continuous with posterior pronotal lobe at same level; posterior lobe with spine near each humeral angle. Corial cell of hemelytron small, variably triangular or trapezoidal. Genital capsule with large dorsoapical process. Parameres weakly inflated in apical half.

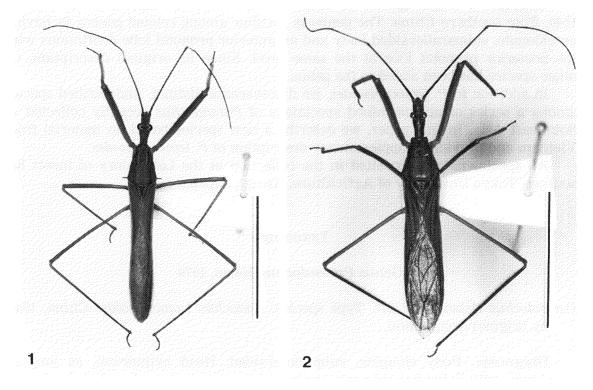
#### Parendochus gracilis sp. nov.

(Figs 1, 3–8, 13–15)

**Description.** *Male* (holotype, Fig. 1). Measurements (in mm): Body length 17.0. Head length 2.8; width across eyes 1.3. Length of anteoculus 1.0, of postoculus 1.3. Antenna length 19.9. Rostrum length 3.4. Pronotum length 3.0; width across humeri 2.3; length of anterior lobe 1.1, of posterior lobe 1.7. Hemelytron length 11.5. Lengths of femur, tibia, and tarsus of foreleg 7.3, 6.8, and 1.2; of midleg 5.8, 5.6, and 1.2; and of hindleg 8.7, 9.3, and 1.3, respectively.

Coloration: Body generally grayish brown. Sides of body, whole rostrum, and dorsum of femora brownish yellow. Hemelytral membrane hyaline, slightly tinged with yellowish brouwn. Margin of abdomen yellow.

Structure: Body sparsely covered with suberect setae intermixed with short, decumbent setae. Head (Figs 3, 4) more than twice as long as width across eyes (length: width across eyes = 20:8.5); spines behind antennal insertions small and conical; anteoculus 4/5 as long as postoculus. Eyes medium-sized, more than half as wide as interoculus in dorsal view. Antennal segment I sparsely covered with

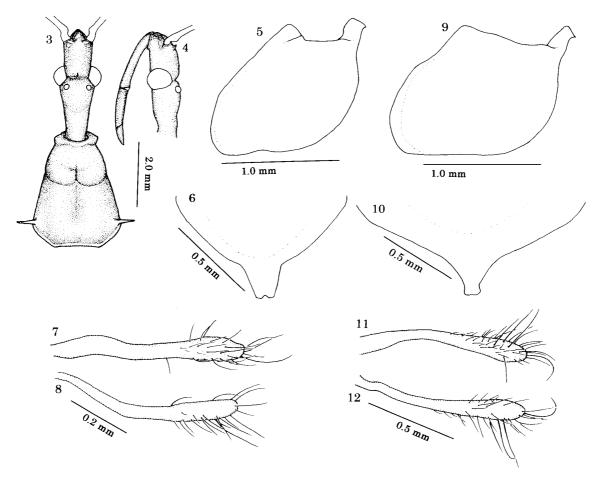


Figs 1, 2. Male adults of *Parendochus* spp. 1, *P. gracilis* sp. nov., holotype (TUA-He-200404); 2, *P. leptocorisoides* from Nong Hoi, Thailand. Scales = 10 mm.

short, erect setae; segment II covered with suberect setae; segments III and IV covered with fine, decumbent setae; proportional lengths of segments I to IV 42:14:29: 15. Rostrum sparsely covered with erect setae; proportional lengths of segments I to III 50:35:15.

Pronotum (Fig. 3) longer than humeral width (length:width = 20:15.5), with posterior and posterolateral margins nearly straight; anterolateral tubercles rounded; anterior lobe 7/10 as long as posterior lobe, decorated with some linear markings composed of short pubescence; humeral spines slender, about 4 times as long as basal width. Scutellum gradually constricted apicad, obtuse at apex, depressed elliptically in middle of elevated portion. Hemelytral coria covered with short, decumbent setae; base of cubital cell less than half as wide as that of postcubital cell (proportion of basal width of cubital and postcubital cells 7:20). Legs covered with erect setae of variable length; longest setae shorter than width of forefemur; forefemur slightly longer than foretibia (forefemur:foretibia = 20:19), twice as wide as foretibia at maximum width; ventral surface of fore- and midfemora and foretibiae densely covered with short, erect setae.

Abdomen subparallel-sided, about 5 times as long as maximum width; poste-



Figs 3–12. *Parendochus* spp. (setae omitted except for 7, 8, 11, 12). 3–8, *P. gracilis* sp. nov. (3 and 4, holotype; 5–8, male paratype); 9–12, *P. leptocorisoides*, male. 3, Head and pronotum, dorsal view; 4, head, lateral view; 5, 9, genital capsule, lateral view; 6, 10, apical part of genital capsule, dorsal view; 7, 11, left paramere, lateral view; 8, 12, left paramere, dorsal view.

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rior margin of tergite VII convex posteriad.

Genitalia (paratype): Genital capsule (Figs 5, 6) evenly inflated ventrally; dorsoapical process with pair of small, downward projections posteriorly. Parameres (Figs 7, 8) rod-shaped, weakly expanded near apex, with erect setae in apical half; longest setae about twice as long as maximum width of paramere. Phallus (Figs 13–15) long; endosoma with pair of sclerotized projections dorsobasally and pair of rounded mediolateral sclerites; pair of dorsobasal projections foliaceous, triangular, rounded apically, directed inward; mediolateral sclerites decorated with small, triangular tubercles; apical part of endosoma equipped with many triangular, strongly sclerotized projections intermixed with numerous minute, weakly sclerotized tubercles.

*Female.* Very similar to male. Body larger than that of male. Abdominal tergite VII roundly expanded posteriad.

*Variation.* Body length ranging from 16.5 to 17.5 mm in male and from 18.5 to 20.0 mm in female. Disc of posterior pronotal lobe sometimes pale.

**Type series.** Holotype:  $\delta$  (TUA-He-200404), "[VIETNAM] Bung Rieng, Xuyen Moc, Ba Ria Vung Tau, 2.I.2002, K. Okajima leg". Paratypes:  $3\delta$ ,  $5\mathfrak{P}$ , same data as for holotype;  $7\delta$  (one used for description and illustrations of genitalia),  $3\mathfrak{P}$ , same locality as for holotype, 3. I. 2002, T. Ishikawa leg.

Distribution. Southern Vietnam.

**Remarks.** This new species resembles *Parendochus leptocorisoides* in general habitus. However, it is separable from the latter by the antennal segment I being more than 2.9 times as long as segment II, the eye being more than half as wide as the interoculus in dorsal view (Fig. 3), the abdomen being about five times as long as its maximal width, the phallosoma having apically rounded dorsobasal projections (Fig 14), and the apical part of the endosoma having numerous minute, weakly sclerotized tubercles and many triangular, strongly sclerotized projections.

This diurnal species was collected in a grassy habitat, most often found on the tops of vegetation. China (1940) observed *P. leptocorisoides* in a similar environment.

**Etymology.** The specific name *gracilis* (meaning slender in Latin) alludes to the narrow body, which is relatively thinner than that of *Parendochus leptocorisoides*.

# Parendochus leptocorisoides (China, 1940)

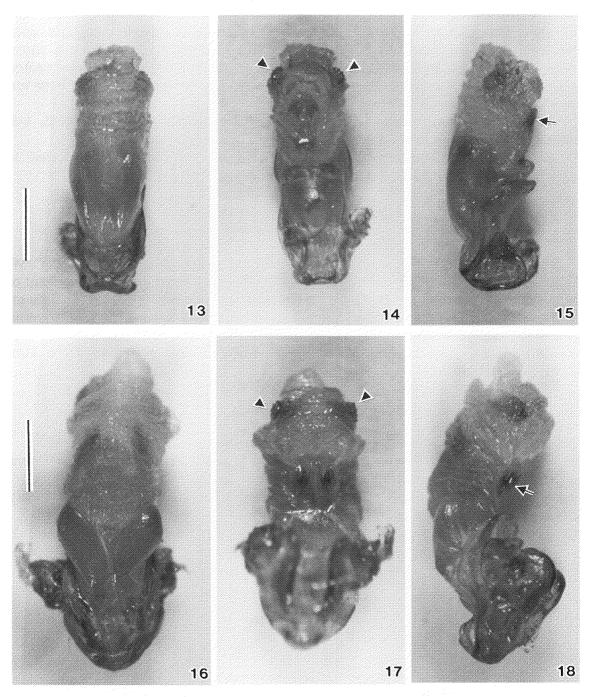
(Figs 2, 9–12, 16–18)

Endochus leptocorisoides China, 1940: 244. Parendochus leptocorisoides: Hsiao 1979: 247.

This species was described in detail by China (1940). Here we provide a supplementary description.

**Description.** Male genitalia: Genital capsule (Figs 9, 10) evenly inflated ventrally; dorsoapical process somewhat compressed laterally, with pair of minute projections posteriorly. Parameres (Figs 11, 12) rod-shaped, gently widened in apical half, slightly arcuate, rounded apically, sparsely covered with erect setae dorsally and laterally; longest setae about twice as long as maximum width of para-

#### Assassin bugs of the genus Parendochus



Figs 13–18. Phallus of *Parendochus* spp. (apical part of endosoma not fully expanded). 13–15, *P. gracilis* sp. nov., paratype; 16–18, *P. leptocorisoides*. 13, 16, Ventral view; 14, 17, dorsal view; 15, 18, lateral view. Arrows indicating dorsobasal projection; arrowheads indicating mediolateral sclerites. Scales=1.0 mm.

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mere. Phallus (Figs 16–18) long; endosoma with pair of sclerotized projections dorsobasally, bi-carinate longitudinally between dorsobasal projections, and with rounded sclerite on each mediolateral side; pair of dorsobasal projections short, spine-like, acute at apex, weakly curved outward; mediolateral sclerites decorated with small, triangular tubercles; apical part of endosoma equipped only with numerous minute, weakly sclerotized tubercles.

**Material examined.** 1\$\display\$, Nong Hoi, Mae Rim, Chiang Mai, Thailand, 1\$\to\$3. V.2000, S. Nagashima leg.

**Distribution.** Southern China and northern Thailand. This species is recorded herein from Thailand for the first time.

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